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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,834	10/17/2000	Toshio Koga	Q60831	1858

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER	
IRSHADULLAH, M	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/688,834	KOGA, TOSHIO	
	Examiner	Art Unit	
	M. Irshadullah	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. 09/688,834.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it exceeds the limit of 150 words in length. Correction is required. See MPEP § 608.01(b).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns", "The disclosure defined by this invention", "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipate by Takikita (US Patent 6,252,524 B1).

Takikita discloses:

Claim 1. A vehicle-onboard electronic toll collection apparatus, comprising:

a) vehicle speed detecting means for detecting a speed of a motor vehicle which passes through a toll gate station equipped with an electronic toll collection system Fig. 1 {31 in 30}, col. 6, lines 63-67, wherein CPU obtaining vehicle speed V from vehicle-mounted unit interface 31 in 30 via 101" indicating that "interface unit 31" is functioning as "speed detecting device or means", vehicle entering "toll collection communication zone" indicating vehicle's passing through some toll collection facility or gate having "road-side machine, Fig. 3, col. 7, lines 60-62" and "road-side machine" of toll facility is equipped with an electronic device or computer, col. 3, lines 17-20: "vehicle-mounted unit communicating with road-side machine which is automatically collecting a toll");

b) communication means for exchanging electronic toll collection information for settlement of toll charge/payment transaction with said toll gate station upon passing through said toll gate station (Col. 5, lines 7-9, wherein "communication unit 6 receiving radio signals fro and sending to road-side machine" indicating unit or device 6 is "communication device or means" intertransmitting or "exchanging" communication

between the vehicle-mounted unit and the road-side machine and as discussed above said road-side machine repesenting a facility or gate for "toll" or "toll charge/payment" collection when the vehicle goes or passes through it);

c) measuring means for measuring reception field intensity of the received electronic toll collection information within a communication coverage area (Col. 5, lines 15-20, wherein "radio wave detector portion or means 5" functioning as "determining or measuring device or means-lines 16-20 for the 'strength or intensity' of radio signal or reception field", "toll data-line 19" is "toll collection information". Said radio wave is received from road-side machine to vehicle-mounted unit or device antenna, col. 5, lines 7-9, and "toll collection zone-col. 5, lines 10-13 " is "communication coverage area"); and

d) decision means for making decision on the basis of said detected vehicle speed and said measured reception field intensity as to a location within said communication coverage area where electronic toll collection information communication can be started while sustaining favorable reception field intensity at said detected vehicle speed, to thereby allow said communication means to perform communication processing on the basis of result of said decision (Col. 5, lines 15-22, wherein "radio wave detector 5 confirming the strength of radio signal, so that control unit or device or means 6 beginning communication with road-side machine" indicating radio wave detector portion's functioning as "decision maker or decision making device or means" and said decision would depend or base on {on the basis of} above determined vehicle speed and strength or intensity of received radio signal or reception

field. Said decision relating to "toll collection communication zone or communication coverage-lines 15-19". Moreover, "determining possibility of data communication for communication control unit 6 with road-side machine-lines 20-21" indicating that communication control unit 6 would begin or start with road-side machine, and said communication is possible only within above discussed "toll collection communication zone", one would inherently maintain or sustain the same as preferred or "favorable" one).

Claim 2. An vehicle-onboard electronic toll collection apparatus according to claim 1,

wherein said decision means is so designed as to sample distance data which ensure favorable reception field intensity than the reception field intensity at an entrance location of said communication coverage area on the basis of speed at which said motor vehicle enters said communication coverage area, to thereby generate distance versus-reception field intensity data (Fig. 1 {CPU 2 and Radio Wave Detector Portion or device 5), col. 5, lines 9-14, wherein as discussed above cited CPU and portion or device 5 functioning as "decision maker or decision making source or means", cited "toll collection zone" is the "representative or sample region", {said zone or region comprising length or distance (Col. 8, lines 56-57: length of toll collection communication zone is known)}, is the one where radio signal or reception field strength or intensity is useful or favorable, since it is the zone or coverage are within which communication between communication control unit 6 and road-side machine is

possible, col. 5, lines 20-21), and as compared to this radio signal or reception field strength or intensity at entry point entrance of the zone or coverage area. From the above discussion it is clear that said zone comprising length or distance would produce or generate claimed "distance versus reception field intensity information or data).

Claim 3. An vehicle-onboard electronic toll collection apparatus according to claim 2,

wherein said decision means is so designed as to determine said distance data which can ensure favorable reception field intensity **(As discussed above)** through statistical processing on the basis of speed at which said motor vehicle enters said communication coverage area (Col. 6, lines 59-60, wherein cited formula representing mathematical or arithmetical procedure or process for determining required speed Vr employing data or statistical data relating to speed V, time t etc. and since procedure uses statistical data, cited formula representing "statistical procedure or process". Moreover, a user would use said procedure or process for determining claimed "distance", since speed is defined as: speed= distance/time, from which distance is determine as: distance= time x speed)

Claim 4. An vehicle-onboard electronic toll collection apparatus according to claim 2,

wherein said decision means is so designed as to convert the distance data to time data based on area entering speed (Inherent, since the feature is so long before

practiced in the mathematics art, that at the time of instant invention a user would consider its use as inherent. Example: a vehicle travels 65 miles in 60 minutes, time for traveling 10 miles is 9.2 minutes; i.e., (65 x 10)/65= 9.2 minutes).

Claim 5. An vehicle-onboard electronic toll collection apparatus according to claim 3,

wherein said decision means is so designed as to convert the distance data to time data based on area entering speed (As discussed above, speed is defined as: Speed = distance/time, therefore time = distance/speed and a user would employ the above cited formula).

Claim 6. An vehicle-onboard electronic toll collection apparatus according to claim 1, further comprising:

image display means for displaying the electronic toll collection information exchanged through said communication means as an image while stopping display of the electronic toll collection information in dependence on a vehicle speed signal outputted from said vehicle speed detecting means (Fig. 5 {42}, col. 8, lines 35-38, wherein cited "display 42 showing the position on a map" clearly indicating that 42 is capable of depicting or displaying "image" and a user would use said display for claimed purpose).

Claim 7. An vehicle-onboard electronic toll collection

apparatus according to claim I, further comprising:

voice output means for generating a synthesized voice message signal for prompting change of speed of the motor vehicle in dependence on a vehicle speed signal outputted from said vehicle speed detecting means, for thereby outputting said message in voice (Col. 5, lines 35-37 recited with col. 11, lines 31-32, wherein "display potion or device 14 comprising voice generating device" pointing to reference's producing or generating "output" as "voice message" and "display message showing a message to decelerate the vehicle" indicating altering or changing the speed and it would occur when above discussed speed detector sends a message which is displayed or outputted on 14, Fig. 1 or 42, Fig. 5).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Knockeart et al., US Patent 6,680,694 B1. Vehicle Information System.

B) Scifres, US Patent 6,491,420 B1. Addressable Vehicle Lighting.

C) Hoffberg, US Patent 6,429,812 B1. Mobile Communication Device.

D) Dwyer et al., US Patent 6,140,941. Open Road Cashless Toll Collection System And Method Using Transponders and Cameras to Track Vehicles.

E) Schuessler, US Patent 5,864,831. Device For Determining Road Tolls.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Irshadullah whose telephone number is (703) 308-6683. The examiner can normally be reached on Monday-Friday 11:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 and for after Final (703) 872-9327.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

M. Irshadullah
January 22, 2004

Susanne Diaz
Susanne Diaz
Patent Examiner
AU 3623